Sexual Function and Disability in the Neurorehabilitation Setting: An Urgent Need for a Multidisciplinary Approach

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ABSTRACT

Sexual function in patients with neurological disabilities is often disregarded by healthcare professionals, though it is a topic of great importance to patients and to those with whom they share significant relationships. Indeed, too often healthcare professionals believe that sexual function is not as important as the disease that brought the patient to the rehabilitation team. Neurological disorders frequently alter sexual response by changing the process of sexual stimulation and precluding arousal, decreasing or increasing desire, and curtailing genital engorgement. In these patients, sexual functioning might also be affected by the psychological and behavioral changes associated with neurological disease. Thus, in the neurorehabilitation setting, it is important to question patients about their sexual functioning so that any associated dysfunction can be addressed. A multidisciplinary approach, including psychological counseling, nursing, and medical investigation, is therefore needed to overcome this important and often neglected concern.

KEYWORDS: Sexuality, sexual function, sexual dysfunction, disability, neurological diseases, counseling

All individuals, regardless of disease and consequent disability, are sexual beings. Indeed, in the context of disabling disease or injury, recovery of sexual function is no less important than any other aspect of the functional rehabilitation. After all, people with disabilities continue to be sexual individuals with sexual desires and activities, and their sexual concerns deserve due attention from healthcare providers.[1] Nonetheless, sexual function in patients with neurological disorders is often disregarded by the rehabilitation team, as clinicians tend to believe that sexuality is not as important as the disease that brought the patient to the rehabilitation team.[1,2] During both the acute and long-term rehabilitation phases, however, the several physical, psychological, and behavioral changes that occur after a neurological disease should also be addressed in terms of their potential to negatively affect sexual function in the patient.[2]

Neurological disorders frequently affect sexual response by changing the process of sexual stimulation and precluding arousal, decreasing or increasing desire, and/or preventing genital engorgement. Patients might lose their ability to communicate physically (e.g., to embrace or stimulate), to engage in sexual intercourse, and/or to maintain urinary and bowel continence during sexual activity.[3,4] Many patients might regard their loss of sexual function as the most devastating aspect of their disease, which underscores the importance of including discussion regarding their sexual functioning in the patient treatment team dialogue, so that any sexual dysfunction (SD) issues can be effectively addressed.

Stroke, demyelinating disorders, brain and spinal cord injuries, and the treatments used in these diseases often cause erectile and/or ejaculation dysfunctions, loss of libido, anorgasmia, and/or pain during sexual intercourse. In recent years, a comprehensive conceptual model of SD in multiple sclerosis (MS) has been developed, in which SD is categorized as primary, secondary, or tertiary SD.[5] Primary SD is directly due to MS-related neurological lesions and deficits affecting the sexual response. Secondary SD is attributed to disease-associated physical impairments and symptoms that indirectly affect the sexual response, including spasticity and contractures, fatigue, bladder dysfunction and cognitive symptoms. Furthermore, adverse effects of medications are also frequent causes of secondary SD. Tertiary SD arises as a result of the psychological, social, and cultural issues associated with having a chronic disabling disease. This model can be applied to various neurological disorders to allow better assessment and clinical management of SD.[5]

The identification of barriers to seeking help for sexual concerns in patients with neurological disorders is an important, although still overlooked and underreported, issue. In this regard, the most common barriers to disclosing sexual problems, as reported by patients, are dominance of the neurological symptoms, the presence of family or friends during consultations, and not being asked.[6] Moreover, physicians, as well as nurses

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and psychologists, might not be comfortable with raising questions concerning sexual issues, often due to a lack of education and training in the physiology and psychology of human sexuality.

Whenever sex and disability are discussed during the counseling of a patient with a neurological disease or dysfunction, it is solely in terms of capacity, technique, and fertility, and there is no reference to sexual feelings.[7] In addition, embedded sociocultural beliefs have created significant barriers that prevent individuals with disabilities from exploring their sexuality.[8] These false beliefs might be more disabling than the physical impairment itself. For example, an individual in a wheelchair is sometimes regarded as an object of pity, not of desire; being "ugly" or overweight does not always result in a person being perceived as asexual, but having a physical disability nearly always does. The worst part of this prejudice is that many people with disabilities believe this myth. Many patients with a neurological disease or dysfunction, if they have erection/ejaculation dysfunctions or loss of sensation in the genital areas, incorrectly assume that sexual intimacy is no longer possible. However, this assumption fails to consider other aspects of sexuality, such as touching, affection, and emotions. Indeed, all individuals with disablity should bear in mind that sex does not only include sexual intercourse; it is not just genital pleasure and does not necessarily have to end with orgasm.

Although SD is common in patients with neurological disorders, its quantification is limited by the paucity of validated, user-friendly scales,[9] especially for use in female patients. Sexual functioning may be measured by using the Arizona Sexual Experience Scale, a brief five-item scale designed to assess the core elements of sexual function (e.g., drive, arousal, penile erection/vaginal lubrication, ability to reach orgasm, and satisfaction with orgasm); the International Index of Erectile Function, a standardized and validated 15-item self-evaluation scale that provides pre- and post-treatment clinical evaluations of erectile function, orgasmic function, sexual desire, satisfaction with sexual intercourse, and general satisfaction;[9] and the Female Sexual Function Index, a brief questionnaire-type measure of female sexual health developed specifically for assessing domains of sexual functioning (e.g., sexual arousal, orgasm, satisfaction, pain) in clinical settings.[10] Psychological screening for depression and anxiety disorders should always be performed too, using validated scales, such as the Hamilton Rating Scales for Depression and Anxiety, to rule out possible psychological/psychiatric causes underlying the SD. Medication history is another important aspect, since there are many drugs commonly used in patients with neruological disorders, such as antidepressants, neuroleptics, sedatives, β-blockers, and diuretics, that might lead to SD.

General, neurological, and urogenital examinations are necessary to point out medical comorbidities. In fact, SD (with regard to erectile dysfunction) can be the first clinical sign of an unknown and untreated cardiovascular disease, so an accurate evaluation of the heart and of the main arteries should be done in selected individuals. A full endocrine and metabolic workup, including serum levels of testosterone and thyroidal function, might be helpful in some cases.[1,5] The instrumental investigation (color duplex ultrasound, pudendal nerve stimulation, and bulbocavernosus reflex) can confirm the suspicion of SD made by history and physical examination and, typically, is used to evaluate erectile function, as this latter is the main complaint of patients with neurological disability.

Significant advances in the pharmacologic treatment of SD have occurred in recent years, most notably after the introduction of sildenafil, the first oral selective phosphodiesterase type 5 (PDE5) inhibitor, in 1998.[11] Sildenafil quickly gained acceptance by the medical community and the public because of its broad efficacy for different types of SD, including not only erectile dysfunction, but also premature ejaculation and female SD, as well as its ease of use with few side effects.[11,12]

Prior to the 1970s, research into sexuality and disability was insignificant. The topic was traditionally considered personal, private, and not an essential component of rehabilitation or overall health. Over the past 20 years, research focusing on this vital issue has grown, and sexual well-being is now considered one of the most important aspects of an individual's quality of life. In fact, most healthcare professionals now appreciate that sexuality is one of the most complex aspects of human life. Sexual function is dependent on the cooperation of several anatomical and physiological systems, which are influenced by cognitive and emotional processes.[13] To assess and treat problems in this area, a multidisciplinary approach is needed, and professionals must have knowledge and understanding of those factors that influence both the dynamics of their patients' relationships and the physical and psychological aspects of their sexual functioning.[7]

Although neurological diseases have long been recognized as causing SD, healthcare professionals working in the neurorehabilitation field have not traditionally paid much attention to SD in their patients because either therapeutic possibilities were scant or they were not prepared or comfortable enough to deal with this issue. Now, however, with the emerging awareness of quality of life as the most important indicator of good patient management, especially in the rehabilitation setting, and with the advent of more effective treatments of SD, ignoring sexuality in disability is no longer acceptable.

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